



Department of Environmental Conservation

Division of Environmental Remediation

Record of Decision
Nassau Tool Works Site
Town of Babylon, Suffolk County
Site Number 1-52-142

September 1998

New York State Department of Environmental Conservation
GEORGE E. PATAKI, *Governor* JOHN P. CAHILL, *Commissioner*

DECLARATION STATEMENT - RECORD OF DECISION

Nassau Tool Works Inactive Hazardous Waste Site Town of Babylon, Suffolk County, New York Site No. 152142

Statement of Purpose and Basis

The Record of Decision (ROD) presents the selected remedial action for the Nassau Tool Works inactive hazardous waste disposal site which was chosen in accordance with the New York State Environmental Conservation Law (ECL). The remedial program selected is not inconsistent with the National Oil and Hazardous Substances Pollution Contingency Plan of March 8, 1990 (40CFR300).

This decision is based upon the Administrative Record of the New York State Department of Environmental Conservation (NYSDEC) for the Nassau Tool Works Inactive Hazardous Waste Site and upon public input to the Proposed Remedial Action Plan (PRAP) presented by the NYSDEC. A bibliography of the documents included as a part of the Administrative Record is included in Appendix B of the ROD.

Assessment of the Site

Actual or threatened release of hazardous waste constituents from this site, have been addressed by implementing the interim response action identified in this ROD; therefore the site no longer presents a current or potential threat to public health and the environment.

Description of Selected Remedy

Based upon the results of the Remedial Investigation (RI) and Interim Remedial Measure (IRM) conducted at Nassau Tool Works, the NYSDEC has determined that no further action is necessary for this site. Nassau Tool Works will be removed from the New York State Registry of Inactive Hazardous Waste Sites.

New York State Department of Health Acceptance

The New York State Department of Health concurs with the remedy selected for this site as being protective of human health.

Declaration

The selected remedy is protective of human health and the environment, complies with State and Federal requirements that are legally applicable or relevant and appropriate to the remedial action to the extent practicable, and is cost effective. This remedy utilizes permanent solutions and alternative treatment or resource recovery technologies, to the maximum extent practicable, and satisfies the preference for remedies that reduce toxicity, mobility, or volume as a principal element.

Date

9/14/98



Michael J. O'Toole, Jr., Director
Division of Environmental Remediation

TABLE OF CONTENTS

SECTION		PAGE
1:	Site Description	4
2:	Site History	4
	2.1 Operational/Disposal History	4
	2.2 Remedial History	4
3:	Current Status	5
	3.1 Summary of the Remedial Investigation	5
	3.2 Interim Remedial Measures	8
	3.3 Summary of Human Exposure Pathways	8
	3.4 Summary of Environmental Exposure Pathways	9
4:	Enforcement Status	9
5:	Summary of Remediation Goals and Selected Action	9
6:	Highlights of Community Participation	9
Figures	- Site Location Map	<i>follows 10</i>
	- Site Plan	<i>follows 10</i>
Tables	- Table 1: Pre- and Post-IRM Results: Soil and Drainage Sediment ..	11
	- Table 2: Nature and Extent of Contamination in Groundwater	13
Appendices	- Appendix A: Responsiveness Summary	A1
	- Appendix B: Administrative Record	B1

SECTION 1: SITE LOCATION AND DESCRIPTION

The Nassau Tool Works site is located in the Town of Babylon, Suffolk County, in south-central Long Island. It is listed on the NYS Registry of Inactive Hazardous Waste Disposal Sites (the "Registry") as Site No. 1-52-142. The site is located in the 300-acre Pinelawn Industrial Area in West Babylon, a series of streets zoned for light industry and the Town of Babylon Landfill. Figure 1 shows the location of the site in the Town of Babylon. A large one-story building, housing Nassau Tool Works, Inc., manufacturing activities, and a paved parking lot and receiving area, occupy most of the four-acre site at 34 Lamar Street, between Kean and Lamar Streets (see Figure 2 for a plan of the site). To the north of the building lies a small undeveloped field. Other manufacturing and service industries, including additional Registry sites, surround Nassau Tool Works. Pride Solvents, north of the site on Lamar Street, is a Class 2 Registry site; Diamond Roller Corporation and New Ross Electrical Contractors, immediately north of the site, while not on the Registry, are under investigation by the Suffolk County Department of Health Services (SCDHS) for contaminant releases.

There are few residences in the Pinelawn Industrial Area. North and south of the industrial area are large cemeteries. No private drinking water wells are known to exist in the industrial area. Approximately one-half mile to the south, however, are residential neighborhoods. The majority, but not all, of these residences receive public water. In October 1997, responding to concerns raised at the first public meeting for Nassau Tool Works, the SCDHS sampled a private well on Matthews Avenue. No chlorinated solvents (site-specific contaminants of concern, as further explained in this ROD) were detected in this private well. Other sampling events have, however, discovered chlorinated solvent contamination in wells south of the Pinelawn Industrial Area which are the subject of ongoing investigation and remedial action.

SECTION 2: SITE HISTORY

2.1: Operational/Disposal History

Since 1969, the site has been used for industrial purposes. Nassau Tool Works, Inc., has operated a manufacturing facility on the property since 1971, performing various precision drilling and grinding operations. Lubricating and cutting oils have been used in these processes. In addition, perchloroethene and 1,1,1-trichloroethane, materials which would be classified as hazardous waste if disposed of or released on site, have been used for degreasing and cleaning. Storage tanks were installed for these materials and a containment area constructed in 1987.

2.2: Remedial History

The Pinelawn Industrial Area has been of interest to NYSDEC and other regulatory agencies since groundwater contaminant plumes were discovered emanating from the area during the 1980s. Through records searches and area-wide investigations, NYSDEC and the SCDHS have identified several area industries as sources. The 1994 report "Preliminary Site Assessment: Pinelawn Industrial Area Site" by Engineering-Science, Inc., for NYSDEC, identified Nassau Tool Works as a potential contributing source to a plume of chlorinated solvents, such as perchloroethene, trichloroethene, and 1,1,1-trichloroethane, in the vicinity of southern Lamar Street. These chlorinated solvents are listed hazardous wastes under 6NYCRR Part 371.

Records indicated Nassau Tool Works' use of some of these solvents, with possible disposal or release through on-site drainage and sanitary facilities. Groundwater flow and the pattern of results from NYSDEC's preliminary groundwater sampling indicated further investigation and/or remedial action was warranted at the site. The recommendation of the 1994 report led to the site's "Class 2" designation on the Registry, indicating the State's determination that it posed a "significant (though not imminent) threat to human health and/or the environment - action required."

SECTION 3: CURRENT STATUS

In response to a determination that the presence of hazardous waste at the Site presented a significant threat to human health and/or the environment, the potentially responsible party (PRP), Nassau Tool Works, has recently completed a Remedial Investigation (RI) and Interim Remedial Measure (IRM).

3.1: Summary of the Remedial Investigation

The purpose of the RI was to define the nature and extent of any contamination resulting from previous activities at the site.

The RI was conducted in one phase between September 1997 and January 1998. A "Remedial Investigation/ Interim Remedial Measures Report" by P.W. Grosser Consulting Engineer, P.C., for Nassau Tool Works, Inc., has been prepared describing the field activities and findings of the RI in detail.

The RI included the following activities:

- *Soil borings to investigate physical properties of soil and hydrogeologic conditions, and installation of monitoring wells for analysis of groundwater. Two rounds of monitoring well samples were taken in November and December 1997.*
- *Excavation of test pits to locate and access underground drainage/leachfields.*
- *Sampling of sediment in dry wells and sanitary cesspools around the site. Dry wells were selected based on proximity to potential contaminant discharge areas (e.g. floor drains, loading bays). Cesspools included primary and secondary (overflow) leach pools; secondary pools were sampled if significant contamination was found in the primary pool.*

To determine which media (soil, groundwater, etc.) contain contamination at levels of concern, the RI analytical data were compared to environmental Standards, Criteria, and Guidance (SCGs). Groundwater, drinking water and surface water SCGs identified for the Nassau Tool Works site were based on NYSDEC Ambient Water Quality Standards and Guidance Values and Part V of NYS Sanitary Code. NYSDEC TAGM 4046 soil cleanup guidelines (based on the protection of groundwater, background conditions, and risk-based remediation criteria) were used as SCGs for soil and dry well/ cesspool sediments.

Based upon the results of the remedial investigation in comparison to the SCGs and potential public health and environmental exposure routes, certain areas and media of the site required remediation. An IRM, as described in Section 4.2, was completed which the State believes has adequately addressed this contamination. Table 1 summarizes soil and drainage sediment contamination before and after the IRM. More complete information can be found in the RI/ IRM Report.

Chemical concentrations are reported in parts per billion (ppb) or parts per million (ppm). For comparison purposes, SCGs are given for each medium.

3.1.1 Nature of Contamination:

As described in the RI Report, many soil, drainage sediment, and groundwater samples were collected at the Site to characterize the nature and extent of contamination.

The majority of site-related contamination consisted of metals, particularly lead, iron, chromium, and zinc, found in soils and sediments at various locations (described further below). Volatile organic compounds (VOCs), both chlorinated and petroleum-derived, were occasionally detected in impacted soils and sediments.

As expected from previous investigation results, chlorinated VOCs were noted in groundwater, primarily 1,1,1-trichloroethane, 1,1-dichloroethane, and chloroethane. The pattern of these results is described in the following paragraphs and summarized on Table 2. The pattern of groundwater results does not point to the site as the source of VOCs in groundwater.

3.1.2 Extent of Contamination

Tables 1 and 2 summarize the extent of contamination for the contaminants of concern in soil/ sediments and groundwater, and compare the data with the remedial action levels (SCGs) for the site. The following are the media which were investigated and a summary of the findings of the investigation. Sample locations are shown on Figure 2.

Soil

Soils surrounding a 550-gallon underground storage tank south of the Nassau Tool Works building, near dry well DW-7 (see Figure 2), were found to be contaminated in excess of SCGs for metals such as chromium, iron and nickel. The tank itself was empty of liquids at the time of its removal, and no VOCs were detected in surrounding soils. Other underground storage tanks noted on Figure 2 as "removed" were removed in 1992, according to the RI Report.

Sediments

The term "sediment" is used in this ROD to refer to material sampled and/or removed from various dry wells and sanitary cesspools on Nassau Tool Works' property. The same SCGs used to guide remediation of soils were used for comparison to sediment data. VOCs were detected in a few locations, but most notably in sanitary cesspool SS1. In this cesspool, chloroethane was detected at 12 ppm, toluene at 19 ppm and 1,1-dichloroethane at 0.96 ppm. In addition, 1,1-dichloroethane, a VOC, was found in cesspool

SS-3 at 0.64 ppm, above its SCG. None of the sediments from dry wells DW-1 through DW-8 contained VOCs above SCGs; concentrations were very low or below laboratory detection limits.

Metals including cadmium, chromium, copper, iron, mercury, nickel and zinc were detected in cesspool and dry well sediments at times in excess of SCGs. These locations included cesspools SS-1 and its overflow pool OF-1; SS-2; SS-3; and the SS-4 leach pool OF-1. Dry wells DW-2, DW-3, DW-4, DW-5, DW-6, and DW-8 contained various metals in concentrations exceeding SCGs.

In several cesspools (SS1, SS2, and SS4), the semi-volatile organic compound 1,4-dichlorobenzene was detected, in concentrations up to 200 ppm. This chemical has been used widely as a septic tank additive. At locations where this contaminant was detected, sediments contaminated above the recommended cleanup objective of 8.5 ppm were removed during the IRM.

Groundwater

The RI focused on the Upper Glacial Aquifer, a regional sand-and-gravel formation extending to a depth of about ninety feet below ground surface in the study area. The six monitoring wells ring the site and are screened at the water table (approximately fifteen feet below ground surface). Water-level measurements indicate a groundwater flow direction to the south-southeast, consistent with other area studies.

Groundwater results are summarized on Table 2. Highest concentrations of the previously named chlorinated VOCs (totaling 450 ppb in the first round and 928 ppb in the second round) were noted in MW-1, an upgradient well. Lesser but notable concentrations were found in MW-4 (totaling 28 ppb in the first round and 76 ppb in the second). Though MW-4 is in close proximity to sanitary leaching pool No. 1, in which high concentrations of chloroethane and 1,1-dichloroethane were found, confirmatory sampling after sediment removal in the leaching pool showed clean soils beneath and does not show this pool to be a local source of groundwater contamination.

The overall pattern of groundwater VOC contamination at the site, furthermore, is indicative of an upgradient source. This conclusion is corroborated by SCDHS' recent discovery on Diamond Roller Corporation' property of high 1,1,1-trichloroethane concentrations in drainage structures and in shallow groundwater, including at Diamond Roller's southern boundary. SCDHS' investigation of New Ross Electrical Contractors has found significant concentrations of trichloroethene, perchloroethene, and *cis*-1,2-dichloroethene in drainage structure sediments on that property. The 1994 NYSDEC investigation and RI data show these last three contaminants primarily on the eastern portion of the Nassau Tool Works property, downgradient of New Ross Electrical Contractors. These findings, and the results of the RI for Nassau Tool Works, have led to the conclusion that Nassau Tool Works is not a contributing source to the chlorinated solvent plume in the southern Lamar Street area.

Metals results in groundwater in the RI do not indicate the individual contaminated soil areas to have caused groundwater contamination. Iron and manganese were found in high concentrations, well in excess of SCGs, both upgradient and downgradient of the site. Groundwater on Long Island contains naturally high concentrations of these metals.

3.2 Interim Remedial Measures:

Interim Remedial Measures (IRMs) are conducted at sites when a source of contamination or exposure pathway can be effectively addressed before completion of the RI.

During the course of the RI, several remedial actions, constituting an IRM, were taken at Nassau Tool Works to address conditions found on site:

- Sediment found to be contaminated in excess of SCGs was vacuumed out of several dry wells and sanitary cesspools and disposed of in a permitted off-site facility. Sediments were removed from cesspools SS-1 through SS-3, SS-4 leach pool OF-1, and dry wells DW-2 through DW-6 and DW-8. Liquids removed from the cesspools were sampled and disposed of at a public sewage treatment plant, as approved by the Suffolk County Department of Public Works, or another permitted facility. Where necessary, pools were also sampled; sediments were removed from overflow pool No. 1 (OF-1) at SS-1. A total of 108.5 tons of sediment was removed from all locations and disposed of at a permitted off-site facility.
- The 550-gallon underground storage tank near DW-7 was removed and confirmatory soil sampling conducted. The tank, which was empty except for 30-50 gallons of sludge, was unearthed, cut up and transported off site to be recycled. The sludge was determined to be non-hazardous and was disposed of at a permitted off-site facility.

Soils in the excavation that had surrounded the tank were sampled. These confirmatory samples, as summarized on Table 1, show slight exceedances of SCGs for several metals. The possibility of this remaining contamination affecting groundwater quality or causing an exposure pathway (Section 4.3) is unlikely. Nassau Tool Works intends to re-pave this area, which will further reduce the potential for impact. No soil removal was determined to be necessary, therefore, and the excavation was backfilled with clean soil.

3.3 Summary of Human Exposure Pathways:

This section describes the types of human exposures that may present added health risks to persons at or around the site. A more detailed discussion of the health risks can be found in Section 6.0, "Exposure Assessment," of the RI Report.

An exposure pathway is how an individual may come into contact with a contaminant. The five elements of an exposure pathway are 1) the source of contamination; 2) the environmental media and transport mechanisms; 3) the point of exposure; 4) the route of exposure; and 5) the receptor population. These elements of an exposure pathway may be based on past, present, or future events.

The primary exposure pathway at the Nassau Tool Works site consisted of dermal contact, or as a more remote possibility, ingestion of contaminated soils, and sediments in drainage structures or leaching pools. Exposure to contaminants in these media would only have occurred upon opening or disturbing these

structures, for instance during the IRM soil removals. The IRMs have effectively eliminated this pathway of exposure through removal of the contaminated soils.

3.4 Summary of Environmental Exposure Pathways:

There are no significant fish or wildlife resources in the vicinity of Nassau Tool Works, the site being located in a large industrial-use area. No surface water bodies are found within a mile of the site. Area-wide groundwater resources are impacted by contaminant plumes emanating from various sources in the industrial area, but not Nassau Tool Works, as previously discussed. NYSDEC and SCDHS are investigating and addressing other known and suspected plume sources.

SECTION 4: ENFORCEMENT STATUS

Potentially Responsible Parties (PRPs) are those who may be legally liable for contamination at a site. This may include past or present owners and operators, waste generators, and haulers.

The NYSDEC and Edison Realty (legal name of site owner) entered into a Consent Order effective October 28, 1996. The Order obligates the responsible party to perform a Remedial Investigation and Feasibility Study.

SECTION 5: SUMMARY OF THE REMEDIAL GOALS AND SELECTED ACTION

The selected remedy for any site should, at a minimum, eliminate or mitigate all significant threats to the public health or the environment presented by the hazardous waste present at the site. The State believes that the remediation already completed at the site, which is described in section 4.2, has accomplished this objective.

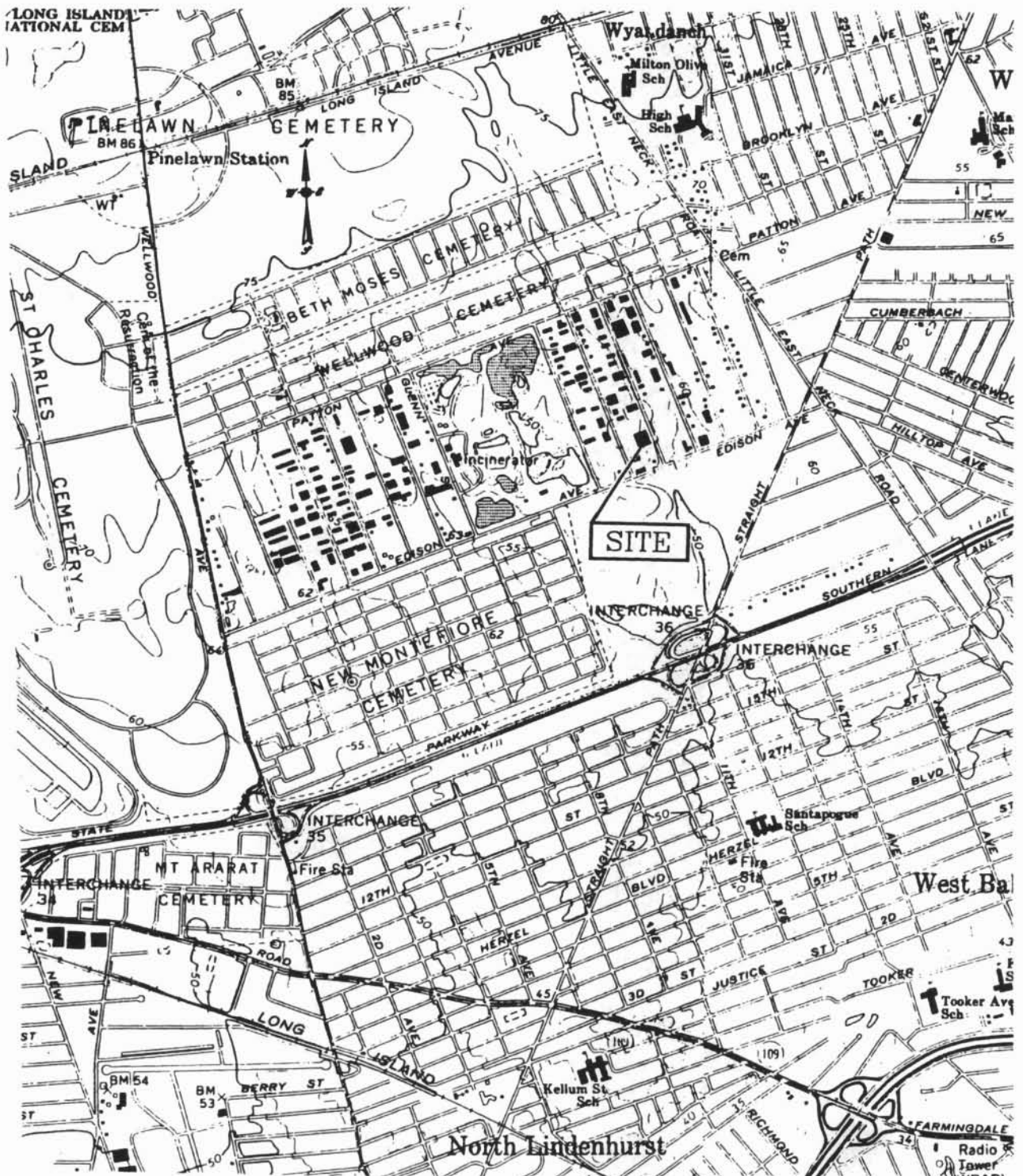
Based upon the results of the RI, and the IRM that has been performed, the NYSDEC has selected no further action as the remedy for the site. The Department will also delist the site from the New York State Registry of Inactive Hazardous Waste Disposal Sites.

SECTION 6: HIGHLIGHTS OF COMMUNITY PARTICIPATION

As part of the remedial investigation process, a number of Citizen Participation (CP) activities were undertaken in an effort to inform and educate the public about conditions at the site and the potential remedial alternatives. The following public participation activities were conducted for the site:

- A Citizen Participation Plan was developed for this site and approved in August 1997.
- A repository for documents pertaining to the site was established.
- A site mailing list was developed which included nearby property owners, local political officials local media and other interested parties.

- A public informational meeting was held on September 24, 1997, to present the work plan for, and describe, upcoming Remedial Investigation activities.
- The Proposed Remedial Action Plan was issued in early July 1998; a public comment period for the PRAP extended from July 15 to August 17, 1998. On July 30, NYSDEC held a public meeting to present the PRAP.
- In September 1998 a Responsiveness Summary was prepared and made available to the public, to address the comments received during the public comment period for the PRAP.



SCALE: 1"=200'



Table 1.
Pre- and Post-IRM Results: Soils and Drainage Sediments

MEDIA	CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppm) PRE-IRM	CONCENTRATION RANGE POST-IRM (ppm) ¹	LOCATIONS EXCEEDING SCGs POST-IRM	SCGs (ppm)
Drainage Structure and Sanitary Cesspool Sediments	Volatile Organic Compounds (VOCs)	Chloroethane	ND - 12E ²	ND	0 of 18	1.9
		Acetone	ND - 1.8	ND - 0.012J ³	0 of 18	0.2
		1,1-Dichloroethane	ND - 0.96	ND - 0.002J	0 of 18	0.2
		Toluene	ND - 19	ND	0 of 18	1.5
	Semi-VOCs	1,4-Dichlorobenzene	ND - 220	ND	0 of 18	8.5
	Metals ⁴	Cadmium	ND - 101	ND - 0.64	0 of 20	10*
		Chromium	4.6 - 199	1.8 - 4	0 of 20	50*
		Copper	9.7 - 1090	1.4J - 33.6	1 of 20	25
		Mercury	0.04 - 5.2	ND	0 of 20	0.1
		Nickel	1.8 - 454	0.62J - 5.1	0 of 20	13
		Lead	2.4 - 72.6	0.79 - 2	0 of 20	4
		Iron	955 - 11,800	534 - 3030	4 of 20	2000
		Zinc	9 - 743	2.0J - 23.2	1 of 20	20
Soils in Excavation after Underground Storage Tank Removal ⁵	Metals	Cadmium	No pre-IRM samples were taken at the UST location.	ND - 1.6	0 of 3	10*
		Chromium		2.2 - 27.5	0 of 3	50*
		Nickel		1.6 - 27.4	1 of 3	13
		Iron		2680-5750	3 of 3	2000
		Zinc		7.2 - 93.2	2 of 3	20

Table 1
Pre- and Post-IRM Results
Soil and Drainage Sediments
(CONTINUED)

Notes:

1. Because VOCs were rarely detected and found at low concentrations in the dry wells, the post-IRM samples for the dry wells were only analyzed for metals and cyanide. Sanitary cesspool post-IRM samples were analyzed for VOCs, metals and cyanide.
 2. The "E" after a value denotes the result is estimated because the high value of this result exceeds the measurement range of the analysis method.
 3. The "J" after a value denotes the result is estimated because it is less than the quantitation limit for the analysis method.
 4. The NYSDEC TAGM "Determination of Soil Cleanup Objectives and Cleanup Levels" (HWR-94-4046) provides several criteria for soil comparison, including site background values and Eastern United States ranges for individual metals, as well as risk-based values or groundwater protection values. The cleanup levels cited on this table represent the lowest values used in the RI/IRM Report for comparison to data *except* for cadmium and chromium (see * note below).
 5. The tank excavation was backfilled with clean soil. Nassau Tool Works, Inc., intends to pave this area, reducing the potential for contact with or groundwater impact from these soils.
- * Proposed NYSDEC soil cleanup objectives (1998); former values were cadmium - 1 ppm and chromium - 10 ppm.

Table 2
Nature and Extent of Contamination in Groundwater

MEDIA	CLASS	CONTAMINANT OF CONCERN	CONCENTRATION RANGE (ppb)	LOCATIONS EXCEEDING SCG₁	SCG (ppb)
Upgradient Groundwater (11/97 and 12/97 rounds: Wells MW-1 and MW-6)	Volatile Organic Compounds (VOCs)	Chloroethane	ND -130	1 of 2	5
		1,1,1-Trichloroethane	ND - 320E*	1 of 2	5
		1,1-Dichloroethane	ND - 460E	1 of 2	5
	Metals	Iron	156 - 9880	2 of 2	300
		Manganese	19.1 - 339	1 of 2	300
Downgradient Groundwater (11/97 and 12/97 rounds)	Volatile Organic Compounds (VOCs)	Chloroethane	ND	0 of 4	5
		1,1,1-Trichloroethane	ND - 12	2 of 4	5
		1,1-Dichloroethane	ND - 70	1 of 4	5
	Metals	Iron	135 - 1760	4 of 4	300
		Manganese	56.1 - 979	2 of 4	300

* The "E" after a value denotes the result is estimated because the high value of this result exceeds the measurement range of the analysis method.

APPENDIX A

RESPONSIVENESS SUMMARY

Nassau Tool Works Proposed Remedial Action Plan Town of Babylon, Suffolk County Site No. 152142

The Proposed Remedial Action Plan (PRAP) for the Nassau Tool Works Inactive Hazardous Waste Site was prepared by the New York State Department of Environmental Conservation (NYSDEC) and issued to the local document repository on July 15, 1998. This Plan outlined the preferred remedial measure proposed for Nassau Tool Works. The preferred remedy is No Further Action, since the NYSDEC believes the Interim Remedial Measure (IRM) has addressed the threat from the site.

The release of the PRAP was announced via a notice to the mailing list, informing the public of the PRAP's availability, and a press notice was distributed to the media.

A public meeting was held on July 30, 1998 which included a presentation of the Remedial Investigation (RI) and the Interim Remedial Measure (IRM) as well as a discussion of the proposed remedy. The meeting provided an opportunity for citizens to discuss their concerns, ask questions and comment on the proposed remedy. These comments have become part of the Administrative Record for this site. No written comments were received.

The public comment period for the PRAP officially closed on August 17, 1998. The notification period for removal of the Nassau Tool Works site from the New York State Registry of Inactive Hazardous Waste Disposal Sites closes on September 15, 1998.

Questions pertaining to public health have been addressed with the assistance of the New York State Department of Health (NYSDOH). The following are the comments received at the public meeting, with the NYSDEC's responses:

COMMENT 1: A commentor stated that he was interested in buying a property in the Pinelawn Industrial Area north of Nassau Tool Works. The commentor asked, if his property had contaminated groundwater beneath it, could he get a mortgage from a bank?

RESPONSE 1: The property in question is unlikely to be over any part of the western Pinelawn Industrial Area plume, because it is located north of, an upgradient of, all current sources of this plume. Groundwater flows to the south-southeast, carrying contamination away from, not under, the property. Some groundwater contamination sources are located to the north of the industrial area and may affect regional groundwater quality, including the subject property. Regardless of whether groundwater is contaminated beneath a property, NYSDEC does not consider the owner liable for that contamination, unless it originated from his or her property. The presence of groundwater contamination may affect development or use of the property, but NYSDEC does not require the owner to investigate or clean up

the contamination unless the owner's activities contributed to it. Some lending institutions acknowledge these principles of liability, but some take a more restrictive view. It is best to research the policies of a variety of banks and mortgage companies. The bank may require an environmental audit, which can vary in complexity and cost. Property sellers and buyers are always welcome to contact NYSDEC to obtain information to help complete an audit or study of the property. Data in NYSDEC files can sometimes reduce the need for the seller/ buyer's own investigation.

COMMENT 2: How do hazardous waste sites affect the values of other properties nearby?

RESPONSE 2: Regardless of the actual health or environmental threats from a site, there is the possibility that plumes emanating from hazardous waste sites may be publically perceived to be a health threat, and this may devalue properties near a site. Since public water supplies are monitored on a routine basis and closely regulated by the Departments of Health, any potential health threat posed by these plumes is rapidly addressed by treatment of the water supply or switching to an alternate, clean source of drinking water. The only possible long term remedy is cleanup of sites, and plumes where appropriate and feasible.

COMMENT 3: How is the Town of Babylon Landfill related to groundwater contamination, and what other sources are affecting groundwater in the West Babylon area?

RESPONSE 3: The old portion of the Babylon Landfill which accepted municipal, commercial and industrial waste was not lined, unlike the adjacent ash landfills currently in use. Since 1947, leachate from garbage, demolition debris, and cesspool waste percolated into the water table, and produced a plume of iron, manganese and sodium in the shallow aquifer that reaches the headwaters of Santapogue Creek about 1.5 miles to the south. In 1994-1995, to comply with a February 1993 NYSDEC Record of Decision, the Town of Babylon capped the old part of the landfill with watertight membranes and soil. With proper maintenance, this cap will prevent almost all future leaching. In addition, in 1996, the Town installed an extraction well to help pump out leachate that is still under the landfill and could move off-site. At NYSDEC's direction, the Town is conducting a long-term sampling program to monitor the off-site plume. The plume appears to affect only the shallow Upper Glacial Aquifer, and not the lower Magothy Aquifer from which public water supply wells draw drinking water.

The types of contaminants that came from the uncapped landfill are very different from those originating from the industries on either side of the landfill and to the north of the Pinelawn Industrial Area. In general, there are more potential health concerns with the chlorinated solvents from the industrial plumes, such as perchloroethylene, trichloroethylene, and 1,1,1-trichloroethane, than from the landfill leachate contaminants. Moreover, there are multiple sources of these chlorinated solvents in the area, and additionally, sources of heavy metals and other contaminants. Sites that are on the New York State Registry of Inactive Hazardous Waste Sites include Pride Solvents (Site No. 152025), U.S. Electroplating (Site No. 152027) and Spectrum Finishing (Site No. 152029) within the Pinelawn Industrial Area. North of the industrial area are Astro Electroplating (Site No. 152036), Cantor Brothers, Inc. (Site No. 152021) and Circuitron Corp. (Site No. 152082). These sites are under order for investigation and remedial action.

In addition to Registry Sites, specific areas within the industrial park are under investigation by NYSDEC and the Suffolk County Department of Health Services (SCDHS). These include northern

Gleam Street, middle Kean Street, southern Lamar Street, southern Mahan Street, and southern Nancy Street. Specific responsible parties have not been identified yet for some of these areas.

COMMENT 4: When does NYSDEC anticipate its investigations of the Pinelawn Industrial Area to be completed?

RESPONSE 4: The individual source sites identified in the industrial area are in various stages of investigation and remediation. It is not unreasonable to expect that investigations and remedial actions for known sources of contamination will be complete by 2005. However, if additional sources are found in the future, or if other responsible parties are uncooperative, this timeframe may be even longer.

COMMENT 5: What has been the impact to drinking water and private wells from these contamination sources?

RESPONSE 5: SCDHS conducts periodic well surveys and has tested wells in suspect areas. The majority of homes and businesses south of the Pinelawn Industrial Area are connected to the public water supply. Public water is obtained from wells greater than 400 feet deep, much deeper than any identified contamination. Moreover, the Suffolk County Water Authority frequently tests public water as required by health codes. Occasionally, homes have been discovered which still use private wells that are screened in the vulnerable shallow aquifer. Some of these wells do not show chemical contamination on testing, and others have shown trace levels of chlorinated solvents. Where wells are impacted, SCDHS works together with the State Health Department and NYSDEC to arrange a hookup to public water.

COMMENT 6: For many years, the public south of the Pinelawn Industrial Area drank shallow groundwater impacted by the Town of Babylon Landfill and industrial sources, before public water was installed in the 1980s. There are an abundance of cancer cases among the residents in the impacted area. Many residents do not believe the local and state governments have investigated these concerns or provided adequate assistance to this community.

RESPONSE 6: The response of the NYSDEC, NYSDOH, and the Suffolk County Department of Health Services (SCDHS) to the groundwater contamination south of the industrial area has been twofold: 1) to encourage residents to abandon private water supplies and hook up to public water; and 2) to investigate and clean up (or compel clean-up) of the sources of contamination. These efforts have greatly reduced the threat to public health in this community, but we are aware of past use of contaminated water and possible present use in some locations. It is important that community organizations keep these local and state agencies informed of individuals who still use private wells. As to illness (including cancer), concerned individuals or organizations are welcome to contact NYSDOH's Health Liaison Program, 2 University Place, Albany, NY 12205, (800) 458-1158 for information about the health effects of environmental contamination and direction toward appropriate medical care.

COMMENT 7: Nassau Tools is no longer considered responsible for groundwater contamination, but they spent considerable money to prove this to the NYSDEC. Will anyone reimburse them?

RESPONSE 7: Nassau Tools did not turn out to be a groundwater contamination source, but contaminated soil was discovered on their property and had to be removed. One reason the groundwater

investigation was necessary was to show that this soil contamination was not impacting groundwater quality. The State cannot reimburse Nassau Tool Works, but the company could pursue others who are responsible for contamination present under their property.

COMMENT 8: This site was investigated and dealt with quickly because Nassau Tool Works cooperated with the State. All responsible industries should be this cooperative.

RESPONSE 8: From work plan approval in June 1997 to the present, the period of time for remediation of Nassau Tool Works was relatively short; many delays were avoided by the company's adherence to schedules in the Order on Consent and in work plans. The company's representatives frequently sought review and guidance from NYSDEC, followed standard procedures for sampling and testing, and submitted reports that were largely complete and did not need major revisions.

APPENDIX B

ADMINISTRATIVE RECORD INDEX

Nassau Tool Works, Site No. 152142
September 1998

1. NYSDEC, July 1998. Meeting Invitation/ Fact Sheet for the Public Informational Meeting held on July 30, 1998, and the public comment period held from July 15 to August 17, 1998.
2. NYSDEC, July 1998. Proposed Remedial Action Plan for Nassau Tool Works, Site No. 152142.
3. P.W. Grosser Consulting Engineers, for Nassau Tool Works, Inc., July 1998. Revised Remedial Investigation/ Interim Remedial Measures Report.
4. P.W. Grosser Consulting Engineers, for Nassau Tool Works, Inc., August 1997. Citizen Participation Plan for the RI/FS.
5. P.W. Grosser Consulting Engineers, for Nassau Tool Works, Inc., June 1997. Revised Work Plan for the Remedial Investigation/ Feasibility Study.
6. P.W. Grosser Consulting Engineers, for Nassau Tool Works, Inc., June 1997. Revised Quality Assurance Project Plan for the RI/FS.
7. P.W. Grosser Consulting Engineers, for Nassau Tool Works, Inc., June 1997. Revised Health and Safety Plan for the RI/FS.
8. Order on Consent Index No. W1-0775-96-07, executed October 28, 1996 between NYSDEC and Edison Realty (for Nassau Tool Works, Inc.), Respondent. Subject: Development and Implementation of a Focused Remedial Investigation/ Feasibility Study for an Inactive Hazardous Waste Disposal Site.
9. Letter from Robert Marino, NYSDEC, to the Town Clerk, Town of Babylon, April 9, 1996. Notification of the classification of Nassau Tool Works as a Class 2 site on the Registry of Inactive Hazardous Waste Sites.
10. Engineering-Science, Inc., for NYSDEC, November 1994. Preliminary Site Assessment: Pinelawn Industrial Area, West Babylon, Suffolk County.